

Changes in Metropolitan Area Definition, 1910-2010

by

**Todd Gardner
U.S. Census Bureau**

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Abstract

The Census Bureau was established as a permanent agency in 1902, as industrialization and urbanization were bringing about rapid changes in American society. The years following the establishment of a permanent Census Bureau saw the first attempts at devising statistical geography for tabulating statistics for large cities and their environs. These efforts faced several challenges owing to the variation in settlement patterns, political organization, and rates of growth across the United States. The 1910 census proved to be a watershed, as the Census Bureau offered a definition of urban places, established the first census tract boundaries for tabulating data within cities, and introduced the first standardized metropolitan area definition. It was not until the middle of the twentieth century, however, the Census Bureau in association with other statistical agencies had established a flexible standard metropolitan definition and a more consistent means of tabulating urban data. Since 1950, the rules for determining the cores and extent of metropolitan areas have been largely regarded as comparable. In the decades that followed, however, a number of rule changes were put into place that accounted for metropolitan complexity in differing ways, and these have been the cause of some confusion. Changes put into effect with the 2000 census represent a consensus of sorts for how to handle these issues.

Keyword: statistical geography, metropolitan areas, urbanized areas, history

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Conceptual Issues in Metropolitan Definition

Establishing standardized metropolitan definitions involves four issues:

1. **Core** - What constitutes the core of a metropolitan area? What is the appropriate population threshold for a metropolitan core? Should the core be a city (political geography) or an urbanized area (statistical geography)?

2. **Extent** - How do we determine the bounds of each metropolitan area? What are the basic geographic building blocks of metro areas? What kinds of links can we measure to assess the connection between the core and outlying territory of a metro area? What kinds of data can be collected and analyzed for this purpose?
3. **Complexity** - How do we classify areas with multiple cores? Is the better approach to build larger areas and subdivide them, or construct smaller areas and then combine them? Which places should be designated as employment centers?
4. **Hierarchy** - How should we distinguish different types of areas in the metropolitan network? Can we meaningfully establish a system of classification that describes the metropolitan hierarchy?

The Census Bureau took the first step in this effort in 1910 with the introduction of the Metropolitan District. Despite changes to the standards over the next few decades, this era lasted until the introduction of the Standard Metropolitan Area in 1950. By 1959, however, to emphasize that these areas were for statistical purposes, the word “Statistical” was added, and a new combination unit, the Standard Consolidated Area (later changed to Standard Consolidated Statistical Area), was introduced, as well. This era emphasized smaller metropolitan units that could be combined to form larger areas. In 1983 a new approach was taken, emphasizing larger units that could be subdivided into component areas. With the 2000 census, changes were made that not only took both approaches (subdividing and combining metropolitan units), but also added a new category of smaller statistical geography called Micropolitan Statistical Areas in an effort

to take greater account of the metropolitan hierarchy in the United States. Table 1 provides an overview of the major changes in metropolitan definition from 1910 to 2010.

Table 1. Metropolitan Eras

Era	Years	Core	Population Threshold	Basic Geo Unit	Key Places	Subunit	Combination
Metropolitan Districts	1910-1949	Places	1910: 200,000 1930: 100,000 1940: 50,000	MCDs	Central Cities	-	-
SMA Standard Metropolitan Areas	1950-1959	Places	50,000	Counties MCDs in NE	Central Cities	-	-
SMSA Standard Metropolitan Statistical Areas	1959-1983	Places	50,000	Counties MCDs in NE	Central Cities	-	SCSA
MSA/CMSA (Combined) Metropolitan Statistical Areas	1983-2003	Places	50,000	Counties MCDs in NE	Central Cities	PMSA	-
CBSA Core Based Statistical Areas	2003-	Urban Areas	Metro: 50,000 Micro: 10,000	Counties	Principal Cities	Metro Division	CSA

In the Metropolitan District era, the Census Bureau experimented with the threshold of entry for metropolitan classification. Between 1910 and 1940, the population threshold of central cities was lowered from 200,000 to 50,000, which meant delineating more areas. The population threshold of 50,000 has been maintained continuously since 1940, but in 2003 place-based metro area definitions were replaced with “Core Based Statistical Areas” (CBSA). Rather than using political geography (places), Urbanized Areas, which are uniformly defined units of statistical geography, are now used to determine metropolitan cores. The basic geographic unit used as the building blocks for delineating metro areas was simplified with CBSAs, as well. Minor Civil Divisions were

the building blocks of Metropolitan Districts and continued to be the geographic units for New England through the twentieth century; all CBSAs are defined using counties. This greatly simplifies the rules for delineating metro areas and makes tabulation of statistics much more uniform. An alternative New England City and Town Area (NECTA) has been used since 2003, providing continuity with previous eras. Acknowledging that employment centers have developed outside of traditional central business districts, “principal cities” have replaced central cities in the CBSA era.

Early Metropolitan Classification

The timing of the introduction of standardized urban and metropolitan classifications reveals a great deal about the growth of urban and metropolitan populations in the United States. During the period of rapid industrialization, the Census Office (the forerunner to the Census Bureau) recognized the rapid growth of cities and sought to identify urban places to distinguish those communities from areas engaged primarily in agriculture. The Census Office began publishing population figures for urban places in the late-nineteenth century, though they offered little discussion as to what constituted an urban place. It was not until 1910 that the Census Bureau settled on the population threshold of 2500 as the standard definition for urban places. Also, the emergence of large cities led the Census Bureau to establish a new classification system for large urban centers and their associated but less densely populated peripheral areas. The introduction of the Metropolitan District, a standardized metropolitan definition based on the population of the urban core and the population density of adjacent places, came at a time when central cities in industrialized parts of the country were facing

increased resistance to annexation efforts. The Metropolitan District was an effort to gauge the growth of the “Greater City” at a time when suburbanization was transforming cities into a new form and many feared that this political fragmentation would bring about a crisis.¹ In the 1920s Charles E. Merriam expressed his concern about “the loss of citizens drifting from the central city to its environs.... Their loss is a heavy drain on the civic resources of the urban community—a loss which goes a long way to account for the condition of many cities.”²

The Census Office had shown a growing interest in the cities themselves by publishing two volumes entitled *The Report on the Social Statistics of Cities* along with the volumes summarizing the 1880 enumeration.³ *The Report on Social Statistics of Cities* was significant for introducing the first designation of urban agglomeration, which the Census Office called “The Metropolis,” the urbanized area in the vicinity of the city of New York. By 1880 the city of New York was surrounded by a number of densely populated municipalities and the Census Office explained that this urbanized region constituted a “greater metropolis.” “It seems proper, in treating the vast population occupying the cities of New York, Brooklyn, Jersey City, Newark and Hoboken, to consider them not only as constituting five different municipalities, but as one great metropolitan community,” the entry in *The Report on Social Statistics of Cities* began. The Census Office compared the relationship of these cities to one another with the sort of relationship that had existed between Philadelphia and adjacent communities prior to their consolidation in 1854—communities that were united in interest as well as mutual

¹ Kenneth Fox, *Better City Government: Innovation in American Urban Politics, 1850-1937* (Philadelphia: Temple University Press, 1977), p. 140.

² Charles E. Merriam, “Metropolitan Regions,” *The University of Chicago Magazine* 20 (1928), p. 365.

³ George E. Waring, Jr., *Report on the Social Statistics of Cities, Parts I and II* (Washington, DC: Government Printing Office, 1886).

interdependence. In 1880 the Brooklyn bridge and the Hudson River tunnel were under construction and, as the *Baltimore Sun* stated, “When the Brooklyn bridge and the Hudson River tunnel are completed in less than three years hence, this vast population will be compacted and made territorially, as it already is for all things pertaining to common interest, substantially one.”⁴

While the Metropolis was an important step toward metropolitan classification, it was not an effort to determine the extent of suburban growth. The Census Office did not attempt to identify all of New York’s suburbs, but it did point out that “there is no controlling reason why Flushing, New Rochelle, Yonkers, and Paterson might not be included in the same community. Indeed, the villages and towns strung along the railways for 50 miles from New York are very largely made up of persons doing business in the city, or occupied in manufactures which there find their market.”⁵ This brief discussion was the only mention of suburbanization in *The Report on Social Statistics of Cities*. The Metropolis was an urban center and must be seen as an effort to enhance the relative standing of the premier city in the United States with other great cities of the world. As the *Report* stated,

In comparing the population and importance of the great cities of the world, it is proper that each great metropolis should be credited with the natural outgrowth of the original nucleus—the Metropolis of the United States as well as those of England, France, and Germany.⁶

Equating population with significance and therefore associating size with prestige, the designation of the Metropolis was intended to secure a greater rank for New York City compared to other cities of the world and highlight the preeminent role played by the city.

⁴ “New York and its Suburbs,” *Baltimore Sun*, June 29, 1880, p. 2.

⁵ *Social Statistics of Cities, Part I*, p. 532.

⁶ *Social Statistics of Cities, Part I*, p. 532.

The population of New York City proper was 1,206,299, but taken together the population of the Metropolis was 2,061,191. The Census Office constructed the Metropolis as a way of demonstrating that when the full extent of urban development around New York City is taken into account the population Metropolis would approach that of London, though it would still not be as great. Americans were in awe of the British capital, as the *Washington Post* demonstrated when it pointed out that, “The aggregate population of our four largest cities, New York, Philadelphia, Brooklyn and Chicago is 2,311,309. To this we must add St. Louis and Washington to have an aggregate equal to the population of London.”⁷ As the turn of the century approached the Census Office collected more statistics on urban centers around the world.⁸

The Census Bureau shifted its focus to the largest cities in the country in the 1890 census. In a separate volume the Census Bureau published a variety of demographic figures for all cities with populations of greater than 100,000 broken down by city wards. This volume, which focuses on death rates in various parts of cities, demonstrates a concern about the health of the inhabitants of large cities. The Census Bureau broadened the scope of urban tabulations in the 1900 census, showing population tables for cities with populations of over 25,000. In the 1890 and 1900 censuses, the population volumes included tables for the urban population based on the threshold populations of 4000 and 8000 inhabitants. In 1910 the Census Bureau settled on a population threshold that is still in use. All incorporated places with populations of at least 2500 inhabitants are classified as urban. As useful as a consistent urban definition has been, Census definitions of urban and rural are of little value in identifying metropolitan areas. The Census Bureau realized

⁷ *Washington Post*, July 24, 1880, p. 2.

⁸ U.S. National Archives and Records Administration, Record Group 29.

that this classification offered no information regarding the proximity of communities (incorporated and unincorporated places) to large urban centers and they began devoting more attention to this issue as the twentieth century progressed.

Industrial Districts

Realizing that cities by themselves were not adequate units of analysis for many kinds of social and economic research, the Census Bureau created economic regions centered on large cities called Industrial Districts. In 1905, the Census Bureau published statistics for 13 Industrial Districts. These metropolitan regions were not based on population, but instead focused on the economic links between large urban centers and their hinterlands. Arguing that manufacturing in these areas was controlled largely by capital owned by residents of the cities and linked to the urban centers by rail, the Census Bureau mapped the extent of these economically integrated regions.

The Census Bureau also established a classification of the urban hierarchy in the United States based on these Industrial Districts. New York, with a population of 5,294,682, was in a category by itself. In the second class were the Industrial Districts of Chicago, Philadelphia, and Boston. Each of these districts had a population of between 1,000,000 and 2,000,000 and each had an area of roughly 500 square miles. In the third class were the districts of St. Louis, Pittsburgh-Allegheny, Baltimore, Cincinnati, San Francisco, Cleveland, Buffalo, and Minneapolis-St. Paul. Each of these districts had a population in the neighborhood of 500,000 (give or take 150,000). Providence stood by itself in the fourth class. In the original conception of this classification system, Providence was to have been grouped with the Industrial Districts of Detroit, Milwaukee,

New Orleans, Washington, Kansas City, and Louisville, but the Census Bureau offered only the explanation that “statistics for these have not been compiled.”⁹ The Census Bureau also contemplated adding a fifth class of Industrial Districts comprising Indianapolis, Rochester, Denver, Toledo, and Columbus, but did not carry their efforts that far.

Metropolitan Districts

In 1910 the Census Bureau began designating Metropolitan Districts, a metropolitan classification based primarily on population density rather than economic factors. These areas were composed of large urban centers and densely populated adjacent Minor Civil Divisions.¹⁰ As W.M. Steuart, the director of the Bureau of the Census explained, “the Metropolitan District is a population area purely, and may or may not correspond to what might be regarded as the industrial or trade district of the particular city.”¹¹ The Census Bureau employed the concept of the Metropolitan District from 1910 until 1940, but it achieved acceptance only slowly. Many agencies did not see the utility of such a concept; as the Baltimore Chamber of Commerce complained, “for while ... the [metropolitan] district defined is purely a population area, we feel it is of

⁹ U.S. Bureau of the Census, *Industrial Districts: 1905* (Washington, DC: Government Printing Office, 1909).

¹⁰ The term “Minor Civil Division” is a general term that the Census Bureau uses to describe the primary political boundaries of politically independent incorporated and unincorporated places. Some states refer to unincorporated areas as townships, while others refer to them as towns, districts, wards, precincts, hundreds, or beats. Depending on the state, incorporated areas are referred to as villages, towns, boroughs, or cities. In many states, incorporated places lie wholly within unincorporated territory or may straddle the boundaries of more than one township. In some states incorporated places are made independent of townships. The differences in the way states define Minor Civil Divisions make applying a standard definition of metropolitan difficult, particularly when a metropolitan region crosses state lines.

¹¹ Correspondence from W.M. Steuart (Director, Bureau of the Census) to William L. Fairbanks (Baltimore Chamber of Commerce), September 5, 1931, U.S. National Archives, Record Group 29, Entry 160, Box 73 (Folder: Baltimore)

little practical value from a business point of view.”¹² Despite criticisms such as these, the Metropolitan District proved to be an instructive concept and was used in urban planning efforts. The concept was less useful than it might have been, however, because the Census Bureau failed to maintain a consistent definition for metropolitan districts in successive censuses. In the four censuses employing Metropolitan Districts, the Census Bureau used three different definitions.

When Metropolitan Districts were first introduced in 1910, the Census Bureau designated Metropolitan Districts for cities of at least 200,000 inhabitants. The Census Bureau considered all territory within ten miles of the central city, distinguishing between the area contiguous to the central city with a population density of at least 150 persons per square mile and low-density areas further away from the central city. “Metropolitan Districts” referred specifically to the central cities and the high-density area in close proximity to these cities, while the remaining area within ten miles of the central city was called the “Adjacent Territory.” The Census Bureau also provided designations for “emerging metropolises”—cities with a population of at least 100,000, but less than 200,000. All territory within ten miles of the central city was considered “Adjacent Territory,” and the Census Bureau made no distinction between areas of high and low population density for these smaller cities.¹³ The Census Bureau published population figures for 25 Metropolitan Districts and 19 emerging metropolises. In 1920 the Census Bureau used the same classifications. Between 1910 and 1920 the number of

¹² Correspondence from George J. Clautice (Executive Secretary, Baltimore Chamber of Commerce) to W.M. Steuart (Director, Bureau of the Census), August 10, 1931, U.S. National Archives and Records Administration, Record Group 29, Entry 160, Box 73 (Folder: Baltimore)

¹³ U.S. Bureau of the Census, *Thirteenth Census of the United States: 1910, Volume I: General Report and Analysis* (Washington D.C.: U.S. Government Printing Office, 1913), p. 73.

Metropolitan Districts had increased to 29, and the number of emerging metropolises also stood at 29.¹⁴

In 1930 the Census Bureau published statistics for 96 Metropolitan Districts in a separate volume including maps of all Minor Civil Divisions in proximity to the urban centers and a variety of demographic data.¹⁵ As part of the increased attention to the nation's metropolitan centers, however, the Census Bureau changed its definition in ways designed to include more territory in Metropolitan Districts. First of all, the Census Bureau no longer required that a Minor Civil Division had to lie within ten miles of a central city in order to be included in a Metropolitan District. Also, the Census Bureau lowered the threshold population requirement for the central city to 50,000, although the population of the central city and suburbs had to be at least 100,000 to be considered a Metropolitan District. All territory that shared a common boundary with the urban center was included in the Metropolitan District whether it met the population density threshold or not. In some cases, this resulted in large, low-density Metropolitan Districts, particularly in states such as Texas with large, sparsely populated political divisions. In a few extreme cases the Census Bureau included only a portion of a Minor Civil Division, rather than entire sparsely populated districts. The Census Bureau ceased designating areas as Adjacent Territory—Minor Civil Divisions were either included in the Metropolitan District or they were considered nonmetropolitan.

In 1910 and again in 1920 the Census Bureau used its own maps and population figures to calculate the population density of Minor Civil Divisions in order to determine

¹⁴ U.S. Bureau of the Census, *Fourteenth Census of the United States: 1920, Volume I: Population: Number and Distribution of Inhabitants* (Washington D.C.: U.S. Government Printing Office, 1923), p. 62.

¹⁵ U.S. Bureau of the Census, *Fifteenth Census of the United States: 1930, Metropolitan Districts: Population and Area* (Washington, DC: US Government Printing Office, 1932).

the extent of the Metropolitan Districts. In preparing for the 1930 census, however, the Census Bureau decided to alter its methods. The Census Bureau believed that the rules employed in the 1910 and 1920 censuses did not provide a comprehensive definition of a functional metropolitan area. The plan in 1930 was to take economic, social and governmental “control factors” into account to arrive at a more complete metropolitan classification system. Two years before the 1930 enumeration the Census Bureau asked the Chambers of Commerce of all major cities to assist in their efforts toward establishing metropolitan boundaries. The Census Bureau thought they could obtain the necessary data from local business organizations. In the end this effort proved to be a failure because the Census Bureau could not reconcile the varying amounts and quality of information it received from local business organizations. Rather than alter their basic approach to metropolitan classification, the Census Bureau ended up using a metropolitan definition based solely on population density, just as it had in 1910 and 1920.

The correspondence between local representatives and the Census Bureau reveals a great deal not only about the difficulties the Bureau faced in devising a standard metropolitan classification system, but it also offers insight into how cities saw themselves in relation to other urban centers and to their suburbs. This process led to a great deal of misunderstanding especially among cities self-conscious about their status, fearing that the designation of Metropolitan Districts would diminish their image as a significant urban center.

One of the most basic questions with which the Census Bureau struggled was the appropriate population threshold for designating urban centers as central cities of a Metropolitan District. When the Census Bureau initially introduced the Metropolitan

District as an official classification in 1910 the central city threshold size was 200,000 inhabitants, but the Bureau was moving toward a more inclusive threshold. As late as November of 1929 the Census Bureau was planning to establish the population threshold at a central city population of 100,000, though some smaller cities had hoped for a lower threshold. The Census Bureau, unsure of what the population threshold would be in 1930, sent inquiries to smaller cities and many of these cities assumed that they would be designated as the central city of a Metropolitan District. The Census Bureau disappointed many of these Chambers of Commerce by establishing not only a threshold central city population, but a threshold *metropolitan* population as well. In order to be designated as a metropolitan district, the central city had to have a population of at least 50,000 inhabitants and the Metropolitan District population had to exceed 100,000.

The responses the Census Bureau received from local representatives varied widely. Many smaller cities did not want to commit the resources to preparing the sort of report that the Census Bureau requested. As the secretary of the Evansville Chamber of Commerce explained, “The matter of Metropolitan Districts ... was not given any attention by us. This is for the reason that, in our opinion, our Metropolitan District is not of sufficient importance to justify us in preparing such a map.”¹⁶ Many Chambers of Commerce did not even offer an explanation for their lack of cooperation—the Bureau received no response from 20 cities. At the other extreme were the oldest and most established urban centers, which saw this as opportunity to assert their importance in the national urban system. Cities such as New York, Boston, San Francisco and Philadelphia prepared detailed maps and elaborate reports on the extent of their transportation systems

¹⁶ Letter from A.P. Eberlin, Secretary-Manager of the Evansville Chamber of Commerce, to F. Stuart Fitzpatrick, Manager, Civic Development Department, U.S. Chamber of Commerce, February 5, 1929, U.S. National Archives and Records Administration, Record Group 29, Box 73.

and services, as well as their trading areas. Boston, in particular, submitted a detailed map of its metropolitan region that distinguished three rings of suburbs.¹⁷

Some cities drew their metropolitan boundaries so as to take in enormous amounts of territory, much to the chagrin of neighboring cities. In their correspondence with the Bureau, cities in the shadow of large urban centers expressed their resentment about the claims of their more populous neighbors. The city of Flint took exception to Detroit's effort to have much of southeastern Michigan included in its Metropolitan District. The Flint Chamber of Commerce argued that they should have their own Metropolitan District and not be classified as merely a part of the hinterland of a distant urban center. The Census Bureau chided cities such as Detroit and New Orleans that staked claims to areas far beyond the densely populated areas in their immediate proximity.

Many smaller cities in the shadow of other cities saw this as an opportunity to be recognized as a distinct metropolitan center with its own hinterland. The Census Bureau rejected most of these claims, though. Oakland, for example, wanted to be recognized as the center of a metropolitan region separate from that of San Francisco. Despite Oakland's pleas the Census Bureau combined San Francisco and Oakland into a single Metropolitan District. Because San Francisco had the larger population its name appeared first in the name of the San Francisco-Oakland Metropolitan District, as was the standard metropolitan naming convention. The Chamber of Commerce of Lynn, Massachusetts, inquired about central city status, but the Census Bureau quickly dashed their hopes. Despite Lynn's large population, the Census Bureau included the city in the Boston Metropolitan District and Lynn received no special status. The Lynn Chamber of

¹⁷ Letter from Ellerton J. Brehaut, Manager of the Civic Bureau of the Boston Chamber of Commerce, to William M. Steuart, Director of the U.S. Bureau of the Census, December 7, 1929, U.S. National Archives and Records Administration, Record Group 29, Box 73.

Commerce may have looked with dismay upon seeing the inconsistent methods the Census Bureau used to classify cities as central cities. The Census Bureau classified cities such as Paterson, Niagara Falls and East St. Louis as central cities in the 1930 Metropolitan District volume, but denied Lynn, Long Beach, and Gary that distinction, even though they were more populous.¹⁸

In Virginia, a state where cities have a unique independent status, there were a number of controversies. The Newport News Chamber of Commerce was outraged at being included in the Norfolk Metropolitan District. The population of Norfolk in 1930 was 129,710 and its Metropolitan District also included Portsmouth, a city adjacent to Norfolk with a population of 45,704. Newport News, approximately five miles to the northwest across Hampton Roads, was the third largest city in this district with a population of 34,417. In an angry telegram Lewis T. Jester, editor of the local newspaper and president of the Newport News Chamber of Commerce, stated, “The listing of Newport News ...as [part] of greater Norfolk by the Bureau of the Census is unfair and unwarranted and cannot be supported by any ground whatsoever. It is a knife thrust in the back of Newport News and adjoining communities which is unworthy of anyone with the slightest conception of fairness and I am surprised that a branch of the Federal Government should lend itself to any such grab on behalf of the communities which Norfolk seeks to make a tail of her kite. I wish to register an indignant protest.”¹⁹

Raymond B. Bottom, the Business Manager of the Newport News Daily Press, accused the Census Bureau of going “outside of the functions of your office and your constituted

¹⁸ U.S. Bureau of the Census, *Fifteenth Census of the United States, Metropolitan Districts: Population and Area* (Washington: U.S. Government Printing Office, 1932).

¹⁹ Telegram from Lewis T. Jester, editor of *Newport News Daily Press* and *Times Herald* and President of the Newport News Chamber of Commerce, to W.M. Steuart, Director of the U.S. Bureau of the Census, July 30, 1931, U.S. National Archives and Records Administration, Record Group 29, Box 73.

authority to endorse the commercial claims of a particular community.”²⁰ W.M. Steuart, the director of the Census Bureau, tried to placate the representatives of Newport News by changing the name of the Metropolitan District. Steuart’s first suggestion was to name the “Hampton Roads District,” after the local geographical feature. Although the Newport News City Council endorsed this idea, the Census Bureau ultimately opted to name the district the “Norfolk-Portsmouth-Newport News Metropolitan District,” explaining that this name would not be meaningful to most people and that Metropolitan Districts with multiple city names in their titles were common. The Norfolk Chamber of Commerce, not content with the inclusion of Portsmouth and Newport News in its Metropolitan District, appealed to the Census Bureau to include a substantial amount of territory that had been left out of the Norfolk-Portsmouth-Newport News Metropolitan District. The Census Bureau explained that none of the areas that Norfolk specified had a sufficient population density to be included in the Metropolitan District. In the interests of consistency the Census Bureau refused to make an exception for Norfolk despite the unique topography of the region.

Some Chambers of Commerce complained that the method of metropolitan classification based on population density was of little value. When solicited for their contribution in determining the metropolitan district in 1927, the Buffalo Chamber of Commerce argued that “The Buffalo-Niagara Industrial Zone,” made up of Erie and Niagara counties should be the metropolitan district as well.²¹ As William L. Fairbanks

²⁰ Letter from Raymond B. Bottom, Business Manager of the *Newport News Daily Press*, to W.M. Steuart, Director of the U.S. Bureau of the Census, July 29, 1931, U.S. National Archives and Records Administration, Record Group 29, Box 73.

²¹ Correspondence from W.N. Kessel (Secretary, Board of Manufactures, Buffalo Chamber of Commerce) to John Ihlder (Manager, Civic Development Dept., Chamber of Commerce of the United States), June 16,

of the Baltimore Chamber of Commerce stated, “It seems to me that the term ‘metropolitan area’ has little meaning and no valuable purpose unless it does indicate that entire area ... which is closely related to the parent city through conditions having an important bearing upon its economic welfare.”²² The Baltimore Chamber of Commerce was upset by the Census Bureau’s restrictive metropolitan boundaries. The Baltimore Chamber of Commerce argued that several communities that the Census Bureau had excluded from the Baltimore metropolitan district should be included because these towns were served by Baltimore’s retail stores, municipal services, and many residents of these towns were commuters to the city.²³ The *Baltimore Sun* reported the slight, pointing out that the population within metropolitan boundaries as drawn by the Baltimore Chamber of Commerce exceeded 1,000,000, while the population within the Census Bureau’s boundaries was less than 1,000,000.²⁴

Many cities were concerned about losing their status if Metropolitan Districts replaced the city in census data collection efforts. The Director of the Census Bureau explained to several Chambers of Commerce that “in all census tables the population of every city will be that within the corporate limits of the city; and only in the chapter on Metropolitan Areas will the population metropolitan districts be shown together with that of the central city.” He went on to say that, “I have made this explanation in order that

1927, U.S. National Archives and Records Administration, Record Group 29, Entry 160, Box 73 (Folder: Buffalo-Niagara)

²² Letter from William L. Fairbanks, Baltimore Chamber of Commerce, to William M. Steuart, Director, U.S. Bureau of the Census, August 21, 1931, U.S. National Archives and Records Administration, Record Group 29, Box 73.

²³ Letter from George J. Clautice, Executive Secretary, Baltimore Chamber of Commerce, to W.M. Steuart, Director, U.S. Bureau of the Census, August 10, 1931, U.S. National Archives and Records Administration, Record Group 29, Box 73.

²⁴ “New Metropolitan Census is 949,247,” *Baltimore Sun*, August 13, 1931, p. ?.

you may understand what is involved in the establishment of a metropolitan district and lest you might think, perhaps, that the matter is of greater importance than it really is.”²⁵

Perhaps the greatest difficulty that the Census Bureau faced was reconciling the political organization of the various states. As Ray Gill, Secretary of the Beaumont, Texas, Chamber of Commerce explained, “it is impossible to square up our Metropolitan Area by the inclusion of Townships because the Texas Survey is not laid off in the six mile square townships, but simply in the very irregular division of the old Spanish land grants and leagues and fractions thereof which do not match up, one with the other, and for the most part laid off according to cardinal points of the compass.”²⁶ States with longstanding political boundaries, New England and the states with township organization were straightforward. The Birmingham Chamber of Commerce submitted its metropolitan map using township boundaries, but since the Census Bureau did not tally population figures using these boundaries, the map had to be redrawn using “election precincts.”²⁷

It is evident from this correspondence that cities wanted to be recognized as important urban centers with substantial hinterlands. To be a significant urban center carried with it high status and few cities wanted to be regarded as suburbs of another city. Cities were also aware that a considerable amount of development had gone on outside their boundaries and they wanted to be credited for the population of that territory.

Metropolitan Districts allowed cities to count the population that they felt had been

²⁵ Letter from W.M. Steuart, Director, U.S. Bureau of the Census, to the Asheville Chamber of Commerce, November 12, 1929, U.S. National Archives and Records Administration, Record Group 29, Box 111.

²⁶ Letter from Ray Gill, Secretary, Beaumont Chamber of Commerce to F. Stuart Fitzpatrick, Manager, Civic Development Department, U.S. Chamber of Commerce, September 18, 1928, U.S. National Archives and Records Administration, Record Group 29, Box 73.

²⁷ Letter from Dr. Joseph A. Hill, Assistant to the Director, U.S. Bureau of the Census, to O.L. Bunn, Birmingham Chamber of Commerce, March 23, 1928, U.S. National Archives and Records Administration, Record Group 29, Box 73.

denied them because of the political independence of suburban communities. Most of these local representatives equated population with status, even if that population resided outside of the political boundaries of the city.

In 1940 the Census Bureau published statistics for 140 Metropolitan Districts, but once again changed the definition. In that year the Census Bureau decided to designate more areas as Metropolitan Districts by removing the minimum metropolitan population requirement, which had been 100,000 in the 1930 definition. The Census Bureau designated all areas containing an urban center of at least 50,000 to be metropolitan, no matter how little development had taken place outside of the central city boundaries.²⁸ Where the Census Bureau was more inclusive in terms of the number of Metropolitan Districts, it became more restrictive in terms of the territory included within those districts. In 1930 the Census Bureau had put a high priority on establishing Metropolitan Districts that were regularly shaped. To accomplish this the Census Bureau included in Metropolitan Districts all unincorporated county subdivisions that shared a common border with a central city. In some cases this resulted in extensive, low-population-density districts. In 1940, however, the Census Bureau excluded all territory that did not meet the minimum population density threshold, even if an area shared a common border with a central city, and included in Metropolitan Districts only the territory with a sufficiently large population density. In some cases, this resulted in Metropolitan Districts with very little associated fringe population, for example, Amarillo, Texas, which had a population of 51,686, was the central city of a Metropolitan District with a total population of 53,463.

²⁸ U.S. Bureau of the Census, *Sixteenth Census of the Population: 1940, Volume I: Number of Inhabitants* (Washington, DC: US Government Printing Office, 1942), pp. 58-65.

Metropolitan Areas Since 1950

The changes in Metropolitan District definition between 1910 and 1940 had made comparing metropolitan data over time difficult. Also, municipal boundary changes, annexations, and redistricting created a number of difficulties in establishing consistent metropolitan boundaries, particularly in states that did not have well established Minor Civil Divisions. Recognizing the need for a stable and more flexible standard metropolitan definition, in the 1940s the Census Bureau along with several other federal agencies formed the Federal Committee on Standard Metropolitan Areas, sponsored by the Bureau of the Budget. This agency's primary goal was to establish a standardized metropolitan definition that would allow a wide variety of statistical data to be presented in an easily comparable format.

Standard Metropolitan Areas and Urbanized Areas

With the 1950 census the Census Bureau abandoned the Metropolitan District in favor of the Standard Metropolitan Area, which uses counties as the basic geographic unit rather than Minor Civil Divisions. Counties have proven to be an effective compromise between the geographic precision of Metropolitan District boundaries and geographic stability, as well as the availability of data. Using counties as the basic unit of geography in delineating metropolitan areas has resulted in a widely used unit of statistical geography applicable to many different kinds of analyses.

The Census Bureau introduced another, more tightly bounded unit of statistical geography with the 1950 census called the "Urbanized Area" (UA). UAs are contiguous

areas of high-density settlement around urban centers with populations of 50,000 or more. This statistical geography was introduced “to provide a better separation of urban and rural population in the vicinity of our larger cities than was possible under the old definition.”²⁹ Because the basic unit of geography for UAs is the census block, these areas are much more precise in bounding the extent of the developed area around population centers, but limited in terms of available data. Also, because of changes from one census to the next, UAs are difficult to compare directly across time. Still, these areas served as a complement to the decreased level of geographic detail when transitioning from the MCD-based Metropolitan District to the county-based Standard Metropolitan Area. Though metropolitan delineation has undergone several changes, these units of statistical geography have been used in a broadly comparable way ever since.

Standard Metropolitan Areas were defined in 1950 as large urban centers and the counties in which they are located, along with contiguous counties that meet two sets of criteria: 1) counties must display “metropolitan character” and 2) must be integrated with the urban center. To be considered metropolitan, at least two-thirds of the employed persons in the county must be nonagricultural workers. In addition to that, the county must contain at least 10,000 nonagricultural workers or comprise at least 10 percent of the metropolitan nonagricultural labor force. If the county does not contain at least 10,000 nonagricultural workers nor comprise at least 10 percent of the metropolitan nonagricultural labor force, it may still be considered metropolitan if at least half of the county population lives in “a thickly settled area” contiguous to the central city. The

²⁹ Bureau of the Census, *Census of Population: 1950, Volume I: Number of Inhabitants* (Washington, DC: U.S. Government Printing Office, 1952), p. xxvii).

threshold population density that the Census Bureau specified was 150 persons per square mile.³⁰

Standard Metropolitan Statistical Areas

The 1960 census was the first to ask respondents information about their journey to work. Previous censuses had asked about employment status but the 1960 census asked for the specific location where respondents worked. While the standards for delineating metropolitan areas continued to include criteria for “metropolitan character” (for example, in the 1960 census, rather than being home to 10 percent of the metropolitan labor force, a county had to have at least one-tenth as many nonagricultural laborers as the primary county in the metropolitan area), a greater emphasis was placed on establishing that peripheral territory was integrated with the urban core, using commuting as a measure. Identifying place of work along with place of residence presented a more reliable means of establishing the integration of outlying areas with urban centers. The extent of the metropolitan area was then the labor shed with strong commuting ties to the population cores. Questions about the journey to work, included on all subsequent decennial census sample forms and now asked on the American Community Survey, have been essential to determining the extent of metropolitan areas to the present.

In preparation for the 1960 census, the term Standard Metropolitan Area was changed to Standard Metropolitan Statistical Area (SMSA) in order to emphasize its broad applicability for presenting statistics. In March 1958 the criteria for defining metropolitan areas was refined in order to “make it possible for all Federal statistical

³⁰ U.S. Bureau of the Census, *Seventeenth Census of the United States: 1950, Volume I: Number of Inhabitants* (Washington, DC: U.S. Government Printing Office, 1952), p. xxxiii.

agencies to utilize the same boundaries in publishing statistical data useful for analyzing metropolitan problems,” as documented in the 1959 publication *Standard Metropolitan Statistical Areas*.³¹ The changes in the standards for delineating SMSAs were the first to grapple with metropolitan regions with multiple urban cores.

As described in *Standard Metropolitan Statistical Areas*, “[i]n recognition of the special importance of even more inclusive metropolitan statistics,” the New York and Chicago areas were broken up into smaller units. In the case of Chicago, this amounted to breaking up the SMA by state. The Chicago, IL SMSA was just the Illinois part of the old SMA, and the Gary-Hammond-East Chicago, IN SMSA was the Indiana part of the old SMA. The breakup of the New York area was considerably more complex. The New York SMA was broken up into four SMSAs, again largely along state lines, with two New Jersey counties left out of any of the new SMSAs. All of these areas (the four SMSAs and the two unaffiliated New Jersey counties) were reunited in the New York-Northeastern New Jersey Standard Consolidated Area (SCA, later changed to SCSA for Standard Consolidated Statistical Area). In other words, the New York SCA with its two unaffiliated counties was exactly the same as the old SMA, just as the Chicago SCA was exactly the same as the old SMA. In the new rendering, however, more cities were acknowledged as central cities.

No changes were made to the Los Angeles-Long Beach, CA at this time, but in 1963 this two-county area was divided into two single-county SMSAs. Los Angeles County retained the name Los Angeles-Long Beach, CA SMSA, but Orange County became Anaheim-Santa Ana-Garden Grove, CA SMSA. Unlike the breakup of the New

³¹ Bureau of the Budget, *Standard Metropolitan Statistical Areas*, (Washington, DC: U.S. Government Printing Office, 1959), p. 1.

York and Chicago areas, however, these two SMSAs were not reunited in an SCA—at least not right away. It wasn't until 1975 that an SCSA was created for the Los Angeles area. At that time 11 new SCSAs were created, but other than Los Angeles, all of the new SCSAs combined previously independent areas. The Los Angeles SCSA was a hybrid area of sorts, as it recombined Los Angeles and Orange Counties, the SMA from the 1950s, and included two additional adjacent SMSAs, Riverside-San Bernardino-Ontario, CA, and Oxnard-Simi Valley-Ventura, CA, as well.

In 1975 a county-based metropolitan area was created for the New England states. New England had long been the exception in metropolitan definition in that it had continued to use Minor Civil Divisions as the basic unit of geography long after counties had become the building blocks of metro areas across the rest of the country. New England County Metropolitan Areas (NECMA) effectively created several multi-nucleated metro areas, as cities were more closely spaced in this part of the country, often located in the same county. Examples of this sort of combination were Bridgeport-Stamford-Norwalk-Danbury, CT; New Haven-Waterbury-Meriden, CT; New Bedford-Fall River, MA; and Boston-Lowell-Brockton-Lawrence-Haverhill, MA. Updates to NECMAs were few until wholesale changes in the standards for defining metro areas were adopted with the 2000 census.

Metropolitan Statistical Areas

Another change in metropolitan terminology occurred after the 1980 census. The word “Standard” was dropped and (most) metro areas became “Metropolitan Statistical Areas” (MSA). A few larger areas, including many of the SCSAs, became Consolidated

Metropolitan Statistical Areas (CMSA). Rather than being combinations of independently delineated metro areas, CMSAs were the standard unit. Some very large areas with multiple cores, as defined by commuting zones, were subdivided into Primary Metropolitan Statistical Areas (PMSA). The abbreviation MA was adopted in 1990 to collectively refer to MSAs and CMSAs, emphasizing that despite the difference in categorization their units of statistical geography were comparable. To make this clearer, in 2003 all metro areas were labeled Metropolitan Statistical Areas, whether or not they were subdivided. The term PMSA was discarded, opting instead for the less ambiguous “Metropolitan Division”.

At the same time, the new standards acknowledged the increasing distribution of employment to smaller centers outside of the old urban cores. The term “central city” was dropped and replaced with “principal city”. Many metro areas have more than ten principal cities, with Los Angeles having a large (and varying over time) number of principal cities. When new population figures are released, titles of metro areas and metropolitan divisions often have to be changed to reflect variable population growth patterns in these outlying employment centers.

SCSAs from 1959 to 1983 were essentially the same as Consolidated Metropolitan Statistical Areas (CMSA), which were in effect from 1983 to 2003. Looking at Table 1, this would seem to be inconsistent, since SCSA were combinations of metro areas and CMSA were the standard metro unit, but in practice that was the case. Most SCSAs listed in 1975 were simply reclassified as CMSAs and their component SMSAs became PMSAs when the new standards went into effect in 1983. All but two of the SCSAs that were defined between 1959 and 1983 became CMSAs in 1983. Dayton-

Springfield became an MSA not subdivided into PMSAs, and Indianapolis and Anderson became separate MSAs. Otherwise all of the SCSAs became CMSAs, with the old SMSAs becoming PMSAs (one exception to this was the breakup of the San Francisco-Oakland SMSA into separate PMSAs).

Core Based Statistical Areas

Another conceptual shift in defining metro areas occurred in 2003. Where SMSAs had been combined into SCSAs in the period from 1959 to 1983, and CMSAs had been subdivided in the period from 1983 to 2003, the most recent era employs both approaches, depending on the strength of commuting ties between adjacent areas, as outlined in Table 1. Some CMSAs look more like current CSAs, while other CMSAs look more like current metro areas. The main reason for this is because under the old (1983-2003) standards some metro areas "merged" (strong commuting flows from the smaller peripheral area to the core of the larger adjacent area) and others "combined" (significant commuting exchange between adjacent areas) to form CMSAs. Under the current standards, however, only mergers result in two urban cores being included in the same metro area. Combinations, by contrast, remain separate CBSAs but are each included in a Combined Statistical Area (CSA). Under the old standards, Washington and Baltimore combined into the Washington-Baltimore CMSA, but under the current standards, these areas are included in the Washington-Baltimore-Northern Virginia CSA, but remain separate metro areas.

Another factor making multi-nucleated areas is that UAs have been growing together at an increasing rate. As shown in Table 3, when first defined in 1950, there were only 157

Urbanized Areas in the United States and their combined population accounted for less than half of the national total. The number of Urbanized Areas in the United States increased markedly in the decades that followed, with 487 of these large population centers identified in the 2010 census housing 71.3 percent of the total population.

Table 3. Urbanized Areas in the United States, 1950-2010

Year	Number of Urbanized Areas	UAs Absorbed by Larger UAs Over Previous Decade	Total UA Population	Total US Population	Percent of US Population in UAs
1950	157	-	69,249,148	151,325,798	45.8%
1960	213	3	95,848,487	179,323,175	53.5%
1970	249	1	118,524,175	203,211,926	58.3%
1980	366	2	139,170,683	226,545,805	61.4%
1990	396	3	158,258,878	248,709,873	63.6%
2000	452	27	192,323,824	281,421,906	68.3%
2010	486	1	219,922,123	308,745,538	71.2%

In 1950 most of these areas were separated by rural territory, but as population centers have sprawled outward this is no longer the case in many areas. Between 1990 and 2000, 27 urban areas grew together with the smaller area becoming part of a larger Urbanized Area. Most notable of these mergers was Wilmington, Delaware, now part of the Philadelphia Urbanized Area, which now extends into parts of four states (Pennsylvania, New Jersey, Delaware and Maryland). In southern Florida, the Urbanized Areas of Fort Lauderdale-Hollywood-Pompano Beach and West Palm Beach-Boca Raton-Delray Beach grew together with Miami to form an Urbanized Area that now has a population of over 5,000,000. Between 2000 and 2010, however, only one Urbanized Area was absorbed by a larger area (San Rafael-Novato in Marin County is now part of the San Francisco-Oakland Urbanized Area) even though dozens of urban areas share adjacent boundaries. To avoid combining Urbanized Areas with

longstanding identities, the Census Bureau added the following stipulation to the criteria for delineating Urbanized Areas, “any Census 2000 urbanized area will continue to be separately identified as an urbanized area for the 2010 Census, provided that the area still has a population of at least 50,000.”³² Doing this avoided combining areas that had grown to share common boundaries, such as Cleveland, Akron and Canton, Ohio, as well as several Urbanized Areas adjacent to New York.

Table 2, taken from the December 21, 1998, *Federal Register Notice* ³³ summarizes all of the rule changes from 1950 to 1990 for establishing the extent of metro areas.³⁴ With each decade the number and complexity of rules increased. In a major review of metropolitan area definitions in the 1990s, The Metropolitan Area Standards Review Committee (MASRC) sought to reduce the number of rules in determining the extent of metro areas. The CBSA standards put in place following the 2000 census did away with sliding scales for commuting.

Another way the standards following the 2000 census simplified metro delineation was to make the basic unit of geography uniform across the country. For decades, the metro areas of New England used cities and towns as their basic building blocks. Since 2003, however, all states use counties as the basic geographic unit in delineating metro areas. For those wanting statistics for New England that would be comparable to the pre-2003 definitions, an alternate area called New England City and Town Areas (NECTA) was introduced. Unlike the NECMAs of the previous era, NECTAs are regularly updated alongside the official county-based definition.

³² U.S. Census Bureau, “2010 Census Urban Area FAQs,” <https://www.census.gov/geo/reference/ua/uafaq.html>.

³³ This table was labeled as Table 1 in the *Federal Register Notice* but has been renumbered as Table 2 for this paper.

³⁴ Alternative Approaches to Defining Metropolitan and Nonmetropolitan Areas, 63 Fed. Reg. 70529-70531 (December 21, 1998).

Streamlining the commuting rules and establishing counties as the uniform basic unit of metro geography greatly simplified the criteria of determining the extent of metro areas.

Metropolitan Hierarchy

As outlined above, one of the goals in defining Industrial Areas was to establish a metropolitan hierarchy. Also, in its original conception, Metropolitan Districts were divided into two categories: those with central city populations of at least 200,000, and a lower tier of districts with central city populations of between 100,000 and 200,000 inhabitants. By 1930, however, all Metropolitan Districts regardless of the population of the urban core were regarded as equivalent. Since 1950, figures have been tabulated for metro areas of varying sizes but the only formal classification was given in *The Metropolitan Statistical Area Classification: 1980 Official Standards and Related Documents*. Emphasizing the need for greater flexibility for those tabulating figures for metro areas, the Federal Committee on Standard Metropolitan Statistical Areas stated, “Flexibility is further enhanced by the classification of the areas into four levels based on total population size—Level A with 1,000,000 or more; Level B with 250,000 to 1,000,000; Level C with 100,000 to 250,000; and Level D with less than 100,000.”³⁵

In 1998 the MASRC presented a discussion of alternative approaches to metropolitan definition. The MASRC sought to divide metro areas more formally into categories based on the population of the core of each area:

Four kinds of areas are identified in this approach: metropolitan regions, defined around cores of at least 100,000 persons; mesopolitan regions, defined around

³⁵ The Metropolitan Statistical Area Classification: Final Standards for Establishing Metropolitan Statistical Areas Following the 1980 Census, Prepared by Federal Committee on Standard Metropolitan Statistical Areas, Reprinted from *Statistical Reporter*, December, 1979, p. 33.

cores of at least 50,000 persons and less than 100,000 persons; and micropolitan regions, defined around cores of at least 10,000 persons and less than 50,000 persons. Counties not included in a metropolitan, mesopolitan, or micropolitan region will constitute rural community areas.³⁶

A few months later the MASRC presented recommendations to the Office of Management and Budget (OMB). They still sought to categorize metro areas based on the size of the population core, but they put forth an alternative classification that emphasized the largest metro areas, which they referred to as megapolitan areas, with population cores of 1,000,000 or more. Mesopolitan areas were not included in the MASRC recommendations, but neither were metropolitan areas. All areas with cores of between 50,000 and 1,000,000 were put in the category macropolitan areas. This proposal also included micropolitan areas.³⁷ After considering these recommendations OMB decided that for the sake of continuity and simplicity, metropolitan areas would include all areas with cores of at least 50,000 people. They did approve one of the new categories, though, and Micropolitan Statistical Areas, with cores of between 10,000 and 50,000 people, were included with Metropolitan Statistical Areas under the umbrella term Core Based Statistical Areas.

Metropolitan Statistical Areas are now defined starting with UAs, which are still contiguous densely populated areas with populations of 50,000 or more. Micropolitan Statistical Areas are defined starting with Urban Clusters, which are similarly defined areas but with populations of at least 10,000 but less than 50,000. Metropolitan areas and micropolitan areas can both be included in the same CSA but not all metro and micro

³⁶ Alternative Approaches to Defining Metropolitan and Nonmetropolitan Areas, 63 Fed. Reg. 70542 (December 21, 1998).

³⁷ Recommendations from the Metropolitan Area Standards Review Committee to the Office of Management and Budget Concerning Changes to the Standards for Defining Metropolitan Areas, 64 Fed. Reg. 56633 (October 20, 1999).

areas are in a CSA. Phoenix, for example, is one of the largest metro areas but it is not included in any CSA. The standard unit remains the Metropolitan Statistical Area. Though the terminology was clearer, the new categorization of area types did not yield easy acronyms. With the introduction of Micropolitan Statistical Areas, the acronym “MSA” (and “MA” for that matter) became ambiguous and fell out of official usage.

Conclusion

The Census Bureau experimented with different methods of metropolitan classification but was unable to establish a widely employed standard metropolitan definition until the introduction of the Standard Metropolitan Area in 1950. The Standard Metropolitan Area represented a breakthrough in that it proved to be a stable, flexible metropolitan classification system that yielded comparable figures over time. The intuitive rules and standardized geography meant that a wide variety of comparable statistics could be published for all large cities and their hinterlands.

The process of trial and error that the Census Bureau went through illuminates many of the issues involved in implementing standardized urban and metropolitan classifications in historical census data. The distinction between rural and urban is not well defined. In fact, though there is a definition of “urban”, no definition of “rural” has ever been implemented. Rural is simply as residual category—what is not urban is rural. Still, in order to be able to study the unique characteristics of these place types it was necessary to establish a population threshold that would allow researchers to study these populations in as meaningful a way as possible. The distinction between metropolitan and nonmetropolitan is similarly arbitrary, but significant nonetheless. With metropolitan

classifications, researchers could compare large urban centers and their environs, rather than treating these areas as collections of independent communities. Also, changes in terminology have represented significant conceptual changes. While the SMSA/SCSA era (1959-1983) emphasized smaller commuter areas, the MSA/CMSA era (1983-2003) emphasized greater multinucleated areas. In our current era (dating from 2003) both approaches are employed, with Metropolitan Divisions drawn within some metropolitan areas, and Combined Statistical Areas joining adjacent metropolitan and micropolitan areas.

The current rules, which have been in place since 2003, are going to be used for tabulating 2020 census with no substantial changes. This indicates that we have reached a stable period in metropolitan classification. Though the rules may be altered at some point in the future the current means of establishing metropolitan cores, determining the extent of metropolitan areas, and accounting for metropolitan complexity are now widely accepted. The addition of the category of micropolitan areas offers an additional dimension not previously available, but tabulating statistics in a metropolitan hierarchy is still largely up to each researcher.

Table 2
Evolution of Metropolitan Area Standards By Decade (1950s - 1960s)

Decade	Area Name	Central City and Central Core Criteria	Minimum Measures of Integration for Outlying County	Minimum Measures of Metropolitan Character for Outlying County
1950s	Standard Metropolitan Area	City of 50,000 or more population	<ul style="list-style-type: none"> • 15% or more commuting to central county, OR • 25% or more of the jobs in the county are accounted for by commuting from central county, OR • at least four phone calls per subscriber per month to central county 	<ul style="list-style-type: none"> • 10,000 or more nonagricultural workers, OR • 10% or more of the nonagricultural workers in the MA, OR • 50% or more of population residing in MCDs with population density of at least 150 persons per square mile and contiguous to central city • two-thirds or more of labor force must be nonagricultural
1960s	Standard Metropolitan Statistical Area	City of 50,000 or more population, OR two contiguous cities with combined population of 50,000 or more	<ul style="list-style-type: none"> • 15% or more commuting to central county, OR • 25% or more of the jobs in the county are accounted for by commuting from central county 	<ul style="list-style-type: none"> • 75% or more of labor force must be nonagricultural, AND • 50% or more of population residing in contiguous MCDs with population density of at least 150 persons per square mile, OR • nonagricultural employment is either equal to at least 10% of the nonagricultural employment of the central county or at least 10,000, OR • number of nonagricultural workers residing in county is either at least 10% of nonagricultural workers residing in central county or at least 10,000

Table 2 (continued)
Evolution of Metropolitan Area Standards By Decade (1970s-1980s)

Decade	Area Name	Central City and Central Core Criteria	Minimum Measures of Integration for Outlying County	Minimum Measures of Metropolitan Character for Outlying County
1970s	Standard Metropolitan Statistical Area	City of 50,000 or more population, OR city of at least 25,000 population together with contiguous places of population densities of at least 1,000 persons per square mile having a combined population of at least 50,000 in a county of at least 75,000 population	30% or more commuting to central county	<ul style="list-style-type: none"> • 75% or more of the labor force must be nonagricultural <p>If less than 30% commute to central county, must meet two of the following:</p> <ul style="list-style-type: none"> • 25% or more of population urban • 15% population growth rate • density of 50 or more persons per square mile and one of the following: <ul style="list-style-type: none"> • 15% or more commuting to central county • 15% or more commuting from central county • 20% or more commuting exchange with central county
1980s	<ul style="list-style-type: none"> • Metropolitan Statistical Area (MSA), • Consolidated Metropolitan Statistical Area (CMSA), • Primary Metropolitan Statistical Area (PMSA), • New England County Metropolitan Area (NECMA) 	<ul style="list-style-type: none"> • UA of at least 50,000 population • If largest city has less than 50,000 population, MSA/CMSA must have at least 100,000 population • Central cities include largest city in MSA AND each city of at least 250,000 population or 100,000 workers AND each city of at least 25,000 population and 75 jobs per 100 workers and less than 60% out commuting AND each city of at least 15,000 population that is at least one-third the size of the largest central city and meets employment ratio and commuting percentage above. 	<p>Commuting:</p> <p>50% or more and-----> 40% or more and-----> 25% or more and-----></p> <p>15% or more and-----></p>	<p>Character:</p> <p>25 or more persons per square mile, OR 35 or more persons per square mile, OR 35 or more persons per square mile and one of the following:</p> <ul style="list-style-type: none"> • 50 or more persons per square mile • 35% or more urban population • 10% or more of population, or at least 5,000 persons in UA, OR <p>50 or more persons per square mile and two of the following:</p> <ul style="list-style-type: none"> • 60 or more persons per square mile • 35% or more urban population • population growth rate of at least 20% • 10% or more of population, or at least 5,000 persons in UA

Table 2 (continued)
Evolution of Metropolitan Area Standards By Decade (1990s)

Decade	Area Name	Central City and Central Core Criteria	Minimum Measures of Integration for Outlying County	Minimum Measures of Metropolitan Character for Outlying County
1990s	Metropolitan Areas • MSA • CMSA • PMSA • NECMA	<ul style="list-style-type: none"> • City of at least 50,000 population, OR • UA of at least 50,000 population in an MA of at least 100,000 population • Central cities include largest city in MSA/CMSA AND each city of at least 250,000 population or at least 100,000 workers AND each city of at least 25,000 population and at least 75 jobs per 100 workers and less than 60% out commuting AND each city of at least 15,000 population that is at least 1/3 size of largest central city and meets employment ratio and commuting percentage above AND largest city of 15,000 population or more that meets employment ratio and commuting percentage above and is in a secondary noncontiguous UA AND each city in a secondary noncontiguous UA that is at least 1/3 size of largest central city of that UA and has at least 15,000 population and meets employment ratio and commuting percentage above. 	<p>Commuting:</p> <p>50% or more and-----></p> <p>40% to 50% and-----></p> <p>25% to 40% and-----></p> <p>15% to 25% and-----></p> <p>15% to 25% and-----></p>	<p>Character:</p> <p>25 or more persons per square mile, or 10% or more of population, or at least 5,000 persons in UA OR</p> <p>35 or more persons per square mile, or 10% or more of population, or at least 5,000 persons in UA OR</p> <p>35 or more persons per square mile and one of the following:</p> <ul style="list-style-type: none"> • 50 or more persons per square mile • 35% or more urban population • 10% or more of population or at least 5,000 persons in UA, OR <p>50 or more persons per square mile and two of the following:</p> <ul style="list-style-type: none"> • 60 or more persons per square mile • 35% or more urban population • population growth rate of at least 20% • 10% or more of population, or at least 5,000 persons in UA <p>Less than 50 persons per square mile and two of the following:</p> <ul style="list-style-type: none"> • 35% or more urban population • population growth rate of at least 20% • 10% or more of population, or at least 5,000 persons in UA